

31. (previously amended) A method of claim 1, wherein the lysozyme is produced by a bioprocess such as fermentation.
32. (previously amended) A method of claim 1, wherein the mammal is a human.
33. (previously amended) A method of claim 1, wherein the pneumonia is due to viruses, bacteria, or fungi, including pneumonias related to HIV-induced immunodeficiency
34. (previously amended) A method of claim 1, wherein the lysozyme is administered with a carrier, such as DMSO, an alcohol, or water
35. (previously amended) A method of claim 1, wherein the effective amount of lysozyme is from about 10 micrograms per kilogram body weight per day to about 1 milligram per kilogram body weight per day.

REMARKS

We respectfully submit that the rejection of claims 28-35 is based on a misinterpretation of the findings described by Luniakin et al, whose work is cited by the Examiner as anticipating the current claims.

In response to applicants' argument that Luniakin teaches the use of lysozyme in combination with antibiotics, Examiner states that "Nowhere in Luniakin can such a teaching be found." However, Luniakin clearly states on page 2 (paragraph 2) that "In combination with the usual therapeutic agents we have applied liquid lysozyme in aerosols..." and on page 8 (Conclusions #1) that "When applied to the combined therapy for influemzas, lysozyme aerosols..."

These statements from the paper clearly contradict the Examiner. Despite the fact that the "usual therapeutic agents" are not specified by Luniakin, they most certainly consist of antibiotics, since this is the standard treatment for pneumonia. The applicants freely substituted the term antibiotics for "the usual therapeutic agents", since they assumed that the Examiner would be aware of this fact (if the Examiner wishes to challenge the applicants interpretation of term "the usual therapeutic agents", he is advised to consult a medical authority). It would therefore be disingenuous for the Examiner to continue to suggest that, simply because the word "antibiotic" is not used to

describe "the usual therapeutic agents", Luniakin never implied the concurrent use of other antimicrobial drugs in his treatment of pneumonia.

However, even if the applicants' were to accept Examiner's claim that no antibiotics were used in combination with lysozyme, it nevertheless remains clear that Luniakin used other agents in combination with lysozyme. Thus, previous arguments by the applicants that Luniakin teaches away from the use of lysozyme per se as a treatment for pneumonia, and that lysozyme is only administered as an adjunct to the usual therapy for pneumonia, still hold.

The applicant's previous argument that Luniakin may be using lysozyme to potentiate the usual therapeutic agents is supported by the fact that all of the blood parameters measured by Luniakin (properidin, complement, phagocytic activity) pertain only to immunological reactivity. Indeed, on page 3 (fifth full paragraph), Luniakin states that "The examination of non-specific parameters of immunity in influenza patients has revealed the changes as follows..." He then goes on to elaborate in detail the results of measuring these various markers of immune function. There is no attempt to suggest that lysozyme is a specific treatment for pneumonia or a replacement for the usual therapeutic agents. Therefore, it cannot be concluded that Luniakin anticipates the current claims, wherein lysozyme is specified as a stand-alone treatment for pneumonia.

Please note the following referenced remarks in support of the applicants' arguments:

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be led in a direction divergent from the path that was taken by the applicant [In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)].

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

In summary, there is no cause for the Examiner to reject the applicants' claims on the grounds that nowhere in Luniakin can the use of lysozyme in combination with antibiotics be found. To use this argument as the basis for rejecting applicants' claims is clearly wrong and will be appealed if maintained. The Examiner must instead show why

the use of lysozyme in combination with the usual therapeutic agents does not teach away from the use of lysozyme alone as a treatment for pneumonia. Since Luniakin never implies that lysozyme is a substitute for "the usual therapeutic agents," this is not possible. Therefore, the applicants' respectfully request that the claims now be placed in a condition for allowance.

Sincerely yours,



Jerome O. Cantor, MD



Bronislava Shteyngart, MD

242 92nd Street
Brooklyn, New York 11209
Telephone: (718) 990-7495
FAX: (718) 990-1877